Cryptocurrencies

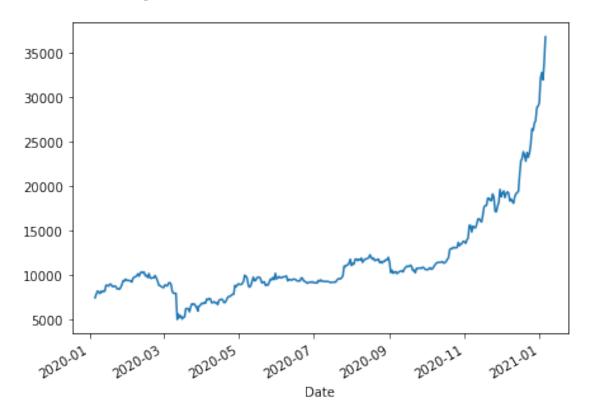
May 5, 2021

1 Taking Crypto data with Python

pandas datareader

```
[4]: #Importing useful libraries
 [5]: from pandas_datareader import data
      import pandas as pd
      import matplotlib.pyplot as plt
[35]: quotation_bitcoin = data.DataReader('BTC-USD', data_source='yahoo',_
      \Rightarrowstart='01-05-2020', end='01/05/2021')
      display(quotation_bitcoin)
      quotation_bitcoin['Adj Close'].plot(figsize=(7, 5))
      plt.show()
                                                                   Close \
                         High
                                         Low
                                                      Open
     Date
     2020-01-05
                  7544.497070
                                 7400.535645
                                               7410.451660
                                                             7411.317383
     2020-01-06
                  7781.867188
                                 7409.292969
                                               7410.452148
                                                             7769.219238
     2020-01-07
                  8178.215820
                                 7768.227539
                                               7768.682129
                                                             8163.692383
     2020-01-08
                  8396.738281
                                 7956.774414
                                               8161.935547
                                                             8079.862793
     2020-01-09
                  8082.295898
                                 7842.403809
                                               8082.295898
                                                             7879.071289
     2021-01-02 33155.117188
                                29091.181641
                                              29376.455078
                                                            32127.267578
     2021-01-03 34608.558594
                                32052.316406
                                              32129.408203
                                                            32782.023438
     2021-01-04 33440.218750
                                28722.755859
                                              32810.949219
                                                            31971.914062
     2021-01-05 34437.589844
                                30221.187500
                                              31977.041016
                                                            33992.429688
     2021-01-06 36879.699219
                                33514.035156
                                              34013.613281
                                                            36824.363281
                                   Adj Close
                       Volume
     Date
     2020-01-05 1.972507e+10
                                 7411.317383
                                 7769.219238
     2020-01-06 2.327626e+10
     2020-01-07 2.876729e+10
                                 8163.692383
     2020-01-08 3.167256e+10
                                 8079.862793
     2020-01-09 2.404599e+10
                                 7879.071289
```

```
2021-01-02 6.786542e+10 32127.267578
2021-01-03 7.866524e+10 32782.023438
2021-01-04 8.116348e+10 31971.914062
2021-01-05 6.754732e+10 33992.429688
2021-01-06 7.528943e+10 36824.363281
```



```
[36]: quotation_eth = data.DataReader('ETH-USD', data_source='yahoo', 

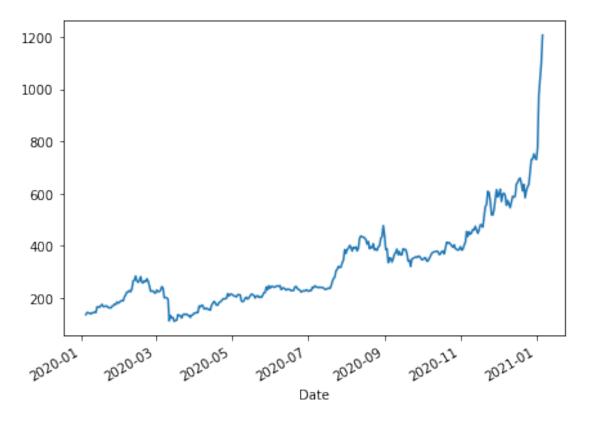
→start='01-05-2020', end='01/05/2021')

display(quotation_eth)
quotation_eth['Adj Close'].plot(figsize=(7, 5))
plt.show()
```

	High	Low	Open	Close	Volume	\
Date						
2020-01-05	139.410202	135.045624	135.072098	136.276779	7.526675e+09	
2020-01-06	144.328186	136.079636	136.305542	144.304153	9.093747e+09	
2020-01-07	145.001770	140.488876	144.311996	143.543991	9.257955e+09	
2020-01-08	146.828003	138.268204	143.487823	141.258133	9.387195e+09	
2020-01-09	141.393982	136.236404	141.155777	138.979202	7.697325e+09	
•••	•••	•••	•••	•••	•••	
2021-01-02	786.798462	718.109497	730.402649	774.534973	1.974077e+10	

2021-01-03	1006.565002	771.561646	774.511841	975.507690	4.520046e+10
2021-01-04	1153.189209	912.305359	977.058838	1040.233032	5.694599e+10
2021-01-05	1129.371460	986.811279	1041.498779	1100.006104	4.153593e+10
2021-01-06	1209.428589	1064.233398	1101.005005	1207.112183	4.469991e+10

Adj Close Date 2020-01-05 136.276779 2020-01-06 144.304153 2020-01-07 143.543991 2020-01-08 141.258133 2020-01-09 138.979202 2021-01-02 774.534973 2021-01-03 975.507690 2021-01-04 1040.233032 2021-01-05 1100.006104 2021-01-06 1207.112183

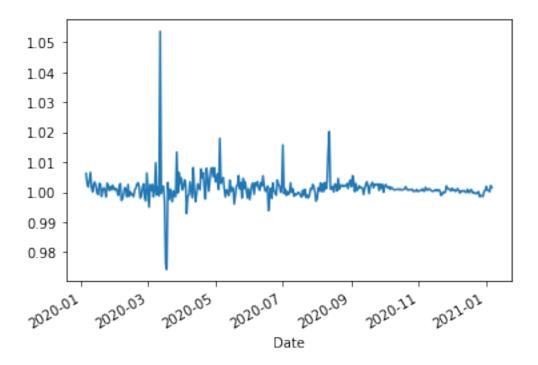


```
[44]: crypto = pd.read_excel('Crypto.xlsx')
      display(crypto)
      for cryptocurrencies in crypto['Ticker']:
          print(cryptocurrencies)
          quotation = data.DataReader(f'{cryptocurrencies}', data_source='yahoo',_
       ⇔start='01-05-2020', end='01/05/2021')
          display(quotation)
          quotation['Adj Close'].plot()
          plt.show()
            Ticker
     0
          USDT-USD
           BTC-USD
     1
     2
           BCH-USD
     3
           ETH-USD
     4
           XMR-USD
     5
          DASH-USD
     6
           ZEC-USD
     7
            AE-USD
     8
           ADA-USD
     9
           EOS-USD
     10
           ICX-USD
     11
          NANO-USD
     12
           NEO-USD
     13
           XLM-USD
     14
           XRP-USD
     15
           CVC-USD
     16
           FUN-USD
     17 STORJ-USD
     18
           XTZ-USD
     19
           REP-USD
     20
           TRX-USD
     21 MIOTA-USD
     22
           XEM-USD
     23
           LTC-USD
     24
          BEAM-USD
     25
          GRIN-USD
     26 ATOM1-USD
     27
           BNB-USD
     28
          LINK-USD
     29
          ALGO-USD
     30
          HBAR-USD
          DOT1-USD
     31
     32
          OMG-USD
          DOGE-USD
     33
     34
           GLM-USD
     35
           VET-USD
```

USDT-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	1.016161	1.001758	1.009921	1.006197	2.409014e+10	1.006197
2020-01-06	1.013589	0.999115	1.006417	1.002903	2.946047e+10	1.002903
2020-01-07	1.011154	0.998249	1.003016	1.001723	3.276551e+10	1.001723
2020-01-08	1.015951	0.990067	1.002026	1.004253	3.517574e+10	1.004253
2020-01-09	1.010140	0.993994	1.002986	1.006573	2.802667e+10	1.006573
	•••	•••				
2021-01-02	1.001991	0.999541	1.001888	1.000600	8.733396e+10	1.000600
2021-01-03	1.001902	0.999169	1.000427	1.000514	1.204257e+11	1.000514
2021-01-04	1.002994	0.999430	1.000500	1.000128	1.259064e+11	1.000128
2021-01-05	1.002832	0.999844	1.000174	1.002202	1.019187e+11	1.002202
2021-01-06	1.002825	0.999568	1.002229	1.001528	1.161051e+11	1.001528

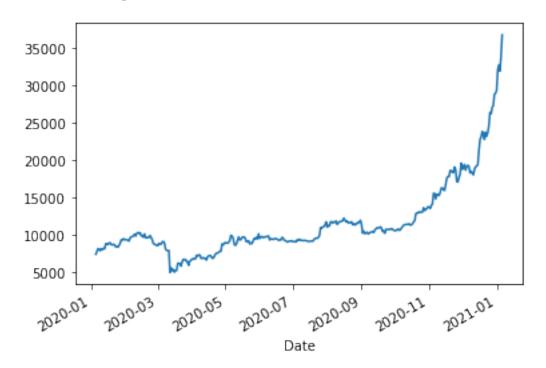
[364 rows x 6 columns]



BTC-USD

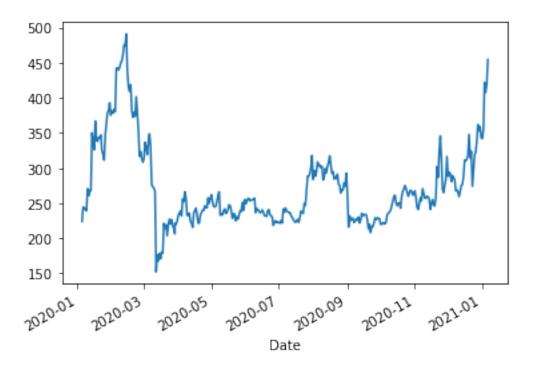
	High	Low	Open	Close	\
Date					
2020-01-05	7544.497070	7400.535645	7410.451660	7411.317383	
2020-01-06	7781.867188	7409.292969	7410.452148	7769.219238	
2020-01-07	8178.215820	7768.227539	7768.682129	8163.692383	
2020-01-08	8396.738281	7956.774414	8161.935547	8079.862793	

2020-01-09	8082.295898	7842.403809	8082.295898	7879.071289
•••	•••	•••	•••	•••
2021-01-02	33155.117188	29091.181641	29376.455078	32127.267578
2021-01-03	34608.558594	32052.316406	32129.408203	32782.023438
2021-01-04	33440.218750	28722.755859	32810.949219	31971.914062
2021-01-05	34437.589844	30221.187500	31977.041016	33992.429688
2021-01-06	36879.699219	33514.035156	34013.613281	36824.363281
	Volume	Adj Close		
Date				
2020-01-05	1.972507e+10	7411.317383		
2020-01-06	2.327626e+10	7769.219238		
2020-01-07	2.876729e+10	8163.692383		
2020-01-08	3.167256e+10	8079.862793		
2020-01-09	2.404599e+10	7879.071289		
•••	•••	•••		
2021-01-02	6.786542e+10	32127.267578		
2021-01-03	7.866524e+10	32782.023438		
2021-01-04	8.116348e+10	31971.914062		
2021-01-05	6.754732e+10	33992.429688		
2021-01-06	7.528943e+10	36824.363281		



BCH-USD

	High	Low	Open	Close	Volume	\
Date	_		_			
2020-01-05	228.219299	222.352692	225.779831	224.096527	1.681830e+09	
2020-01-06	245.106125	223.691818	224.347916	244.557205	2.328225e+09	
2020-01-07	245.844925	234.176788	244.713013	243.258499	2.234915e+09	
2020-01-08	251.297302	234.393234	243.079208	241.055222	2.424660e+09	
2020-01-09	243.047394	232.347992	240.998032	239.222610	1.908678e+09	
•••	•••	•••	•••	•••	•••	
2021-01-02	365.390564	334.569183	342.026672	354.599945	4.608719e+09	
2021-01-03	433.019073	354.650909	354.650909	421.789856	7.273123e+09	
2021-01-04	462.204559	387.911804	422.066254	407.936920	8.597472e+09	
2021-01-05	426.377014	393.809967	407.964508	419.768127	6.465746e+09	
2021-01-06	456.970947	413.555328	419.811340	454.484131	6.501368e+09	
	Adj Close					
Date						
2020-01-05	224.096527					
2020-01-06	244.557205					
2020-01-07	243.258499					
2020-01-08	241.055222					
2020-01-09	239.222610					
	•••					
2021-01-02	354.599945					
2021-01-03	421.789856					
2021-01-04	407.936920					
2021-01-05	419.768127					
2021-01-06	454.484131					
[364 rows x	6 columns]					

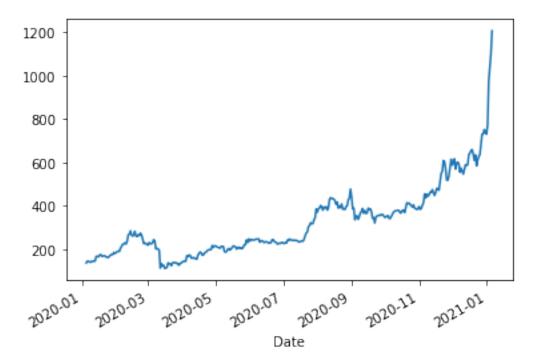


11	•н	- 11	CI	١٦.

	High	Low	Open	Close	Volume	\
Date						
2020-01-05	139.410202	135.045624	135.072098	136.276779	7.526675e+09	
2020-01-06	144.328186	136.079636	136.305542	144.304153	9.093747e+09	
2020-01-07	145.001770	140.488876	144.311996	143.543991	9.257955e+09	
2020-01-08	146.828003	138.268204	143.487823	141.258133	9.387195e+09	
2020-01-09	141.393982	136.236404	141.155777	138.979202	7.697325e+09	
•••	•••	•••	•••	•••	•••	
2021-01-02	786.798462	718.109497	730.402649	774.534973	1.974077e+10	
2021-01-03	1006.565002	771.561646	774.511841	975.507690	4.520046e+10	
2021-01-04	1153.189209	912.305359	977.058838	1040.233032	5.694599e+10	
2021-01-05	1129.371460	986.811279	1041.498779	1100.006104	4.153593e+10	
2021-01-06	1209.428589	1064.233398	1101.005005	1207.112183	4.469991e+10	
	Adj Close					
Date						
2020-01-05	136.276779					
2020-01-06	144.304153					
2020-01-07	143.543991					
2020-01-08	141.258133					
2020-01-09	138.979202					
2021-01-02	774.534973					
2021-01-03	975.507690					

2021-01-04 1040.233032 2021-01-05 1100.006104 2021-01-06 1207.112183

[364 rows x 6 columns]



XMR-USD

2020-01-05

2020-01-06

54.096893

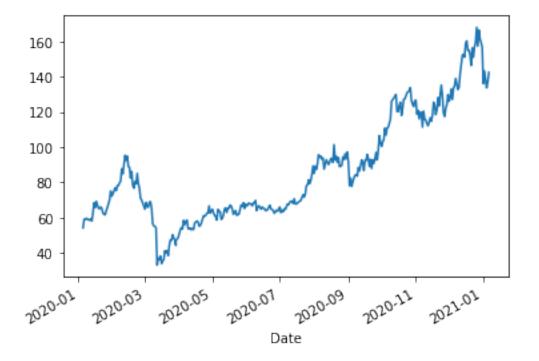
58.970917

XMR-USD						
	High	Low	Open	Close	Volume	\
Date						
2020-01-05	54.777561	50.536011	50.536011	54.096893	5.131611e+07	
2020-01-06	58.993687	53.996861	54.092194	58.970917	7.229228e+07	
2020-01-07	59.860298	55.866047	58.962048	58.818295	7.180369e+07	
2020-01-08	59.812523	56.105423	58.765022	59.464172	6.969804e+07	
2020-01-09	59.789852	57.139057	59.487873	59.197315	6.481031e+07	
•••	•••	•••	•••	•••	•••	
2021-01-02	145.184494	129.235489	136.053528	143.117218	1.794461e+09	
2021-01-03	144.726974	132.161484	143.154175	138.064423	1.234836e+09	
2021-01-04	143.892899	129.685562	138.130280	133.602768	1.098284e+09	
2021-01-05	139.579651	129.675537	133.614655	136.825089	1.316222e+09	
2021-01-06	142.428131	132.892242	136.828476	142.323288	1.127011e+09	
	Adj Close					
Date						

2020-01-07 58.818295 2020-01-08 59.464172 2020-01-09 59.197315

2021-01-02 143.117218 2021-01-03 138.064423 2021-01-04 133.602768 2021-01-05 136.825089 2021-01-06 142.323288

[364 rows x 6 columns]

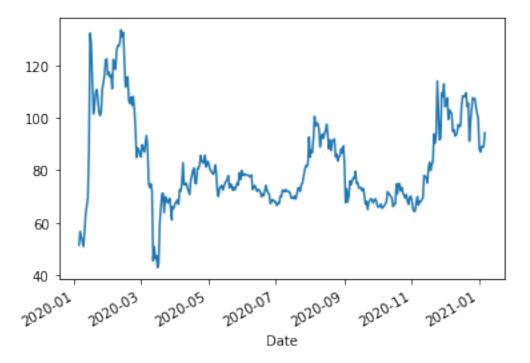


DASH-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	53.517296	46.426079	46.426079	51.479233	439864007.0	51.479233
2020-01-06	57.579594	51.221058	51.536594	56.699776	496237320.0	56.699776
2020-01-07	57.306259	54.052959	56.702038	54.818928	395124565.0	54.818928
2020-01-08	56.534046	51.724026	54.801365	52.916855	314320136.0	52.916855
2020-01-09	53.278660	50.498531	52.883240	50.893806	247077074.0	50.893806
•••	•••	•••	•••	•••	•••	
2021-01-02	93.446022	85.427505	88.267975	86.969772	850378682.0	86.969772
2021-01-03	91.711014	85.384781	86.994598	89.069138	724060416.0	89.069138
2021-01-04	96.565292	85.944817	89.129463	88.797173	729411303.0	88.797173
2021-01-05	90.140236	86.216980	88.804871	89.102776	612664956.0	89.102776

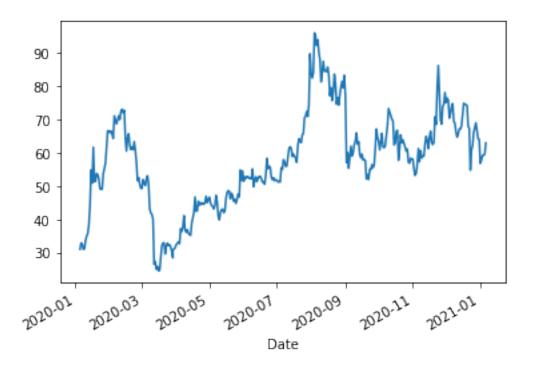
2021-01-06 94.984070 88.315155 89.121979 94.294861 760044337.0 94.294861

[364 rows x 6 columns]



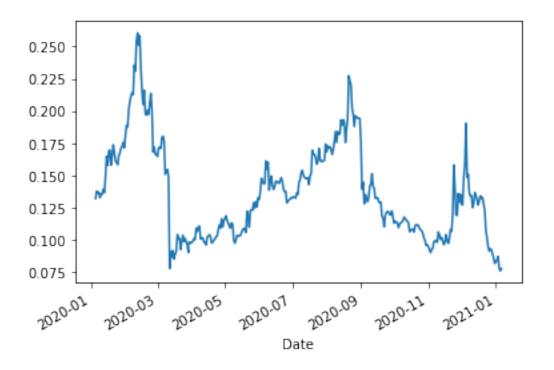
ZEC-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	32.230732	29.964836	30.237431	31.021275	151498329.0	31.021275
2020-01-06	33.332729	30.706402	30.953548	32.892960	197134595.0	32.892960
2020-01-07	33.070171	31.041012	32.935883	32.485596	204009747.0	32.485596
2020-01-08	33.012924	30.240477	32.314491	30.975454	203134823.0	30.975454
2020-01-09	32.231873	30.180904	31.116831	31.102432	159352054.0	31.102432
•••	•••	•••		•••	•••	
2021-01-02	59.775669	55.526180	56.848476	57.804913	591481165.0	57.804913
2021-01-03	60.584614	57.115986	57.812866	59.222908	663264324.0	59.222908
2021-01-04	63.856010	58.160774	59.238068	59.275562	944505720.0	59.275562
2021-01-05	59.697617	58.140125	59.282261	59.600056	647309972.0	59.600056
2021-01-06	63.594009	59.281944	59.597950	62.938351	748707933.0	62.938351



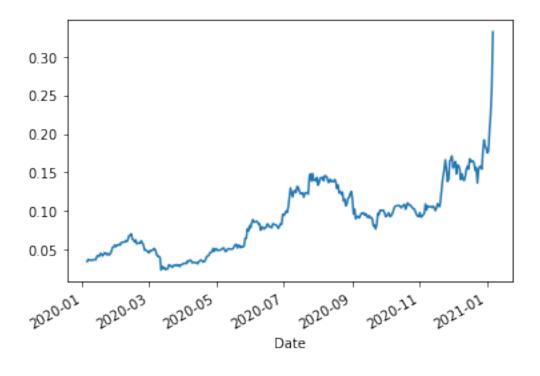
AE-USD

		_	_			
	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.134661	0.131093	0.132411	0.132079	4442583.0	0.132079
2020-01-06	0.138069	0.132005	0.132061	0.137758	5626700.0	0.137758
2020-01-07	0.141435	0.135353	0.137790	0.136512	5258013.0	0.136512
2020-01-08	0.143183	0.135049	0.136519	0.137023	6126528.0	0.137023
2020-01-09	0.137058	0.131032	0.137058	0.132729	4191150.0	0.132729
•••	•••	•••		•••	•••	
2021-01-02	0.085381	0.080559	0.083505	0.083834	6110412.0	0.083834
2021-01-03	0.087625	0.082726	0.083824	0.087072	7817885.0	0.087072
2021-01-04	0.088984	0.075781	0.087063	0.077934	11701489.0	0.077934
2021-01-05	0.079573	0.073632	0.077927	0.075956	10947955.0	0.075956
2021-01-06	0.079795	0.072087	0.075896	0.077761	13302452.0	0.077761



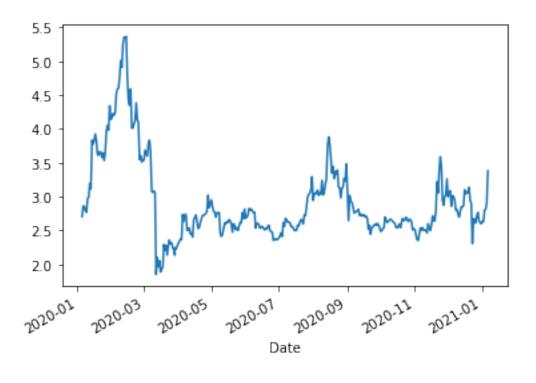
ADA-USD

	High	Low	Open	Close	Volume	Adj Close
Date	0		97 911	02000	, , <u>, , , , , , , , , , , , , , , , , </u>	
2020-01-05	0.035356	0.034545	0.034574	0.034721	2.147918e+07	0.034721
2020-01-06	0.037299	0.034674	0.034751	0.037272	3.798844e+07	0.037272
2020-01-07	0.037807	0.036653	0.037291	0.037047	5.156268e+07	0.037047
2020-01-08	0.038551	0.036015	0.037055	0.036435	4.919334e+07	0.036435
2020-01-09	0.036445	0.035673	0.036445	0.036359	2.656278e+07	0.036359
•••	•••	•••				
2021-01-02	0.184253	0.169233	0.175359	0.177423	1.408850e+09	0.177423
2021-01-03	0.208679	0.173376	0.177382	0.204995	2.303858e+09	0.204995
2021-01-04	0.239661	0.194450	0.205236	0.224762	3.260699e+09	0.224762
2021-01-05	0.264886	0.208454	0.224817	0.258314	4.097207e+09	0.258314
2021-01-06	0.346298	0.256225	0.258549	0.331898	6.170989e+09	0.331898



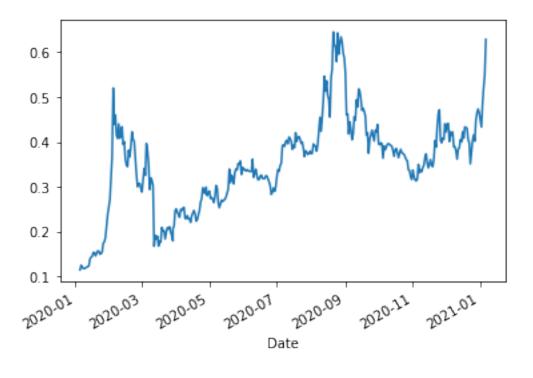
EOS-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	2.782761	2.666032	2.666352	2.701631	1.993837e+09	2.701631
2020-01-06	2.859359	2.698749	2.703251	2.856387	2.350210e+09	2.856387
2020-01-07	2.877198	2.783591	2.854677	2.853442	2.436151e+09	2.853442
2020-01-08	2.934549	2.750405	2.853844	2.789379	2.680039e+09	2.789379
2020-01-09	2.797352	2.713531	2.788867	2.763670	1.870289e+09	2.763670
•••	•••	•••				
2021-01-02	2.713230	2.578513	2.635966	2.626426	2.647912e+09	2.626426
2021-01-03	2.848972	2.587686	2.627229	2.795052	4.016978e+09	2.795052
2021-01-04	3.120060	2.670555	2.797460	2.810309	4.592899e+09	2.810309
2021-01-05	2.947189	2.730145	2.811217	2.897808	3.834552e+09	2.897808
2021-01-06	3.435967	2.857888	2.897836	3.376757	5.868486e+09	3.376757



ICX-USD

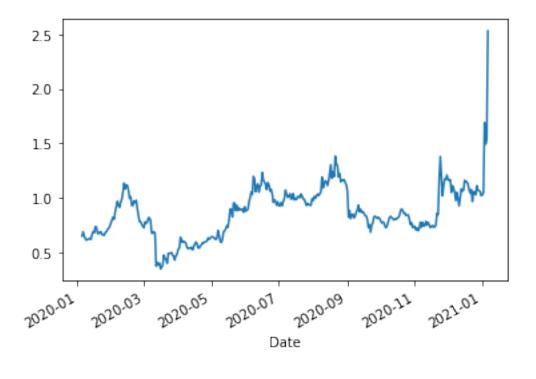
	High	Low	Open	Close	Volume	Adj Close
5 .	mgm	LOW	open	CIOSE	VOIUME	Auj Close
Date						
2020-01-05	0.117602	0.114206	0.114206	0.114429	3937240.0	0.114429
2020-01-06	0.125423	0.113996	0.114346	0.124737	6548097.0	0.124737
2020-01-07	0.126127	0.119151	0.124391	0.120176	8102059.0	0.120176
2020-01-08	0.120412	0.115111	0.120104	0.117315	5147114.0	0.117315
2020-01-09	0.118686	0.116095	0.117250	0.117367	4678274.0	0.117367
•••	•••	•••		•••	***	
2021-01-02	0.460671	0.430237	0.449685	0.433163	39152371.0	0.433163
2021-01-03	0.491416	0.432480	0.433180	0.484707	59941123.0	0.484707
2021-01-04	0.520952	0.462462	0.485175	0.520952	76531889.0	0.520952
2021-01-05	0.565919	0.480545	0.521252	0.549753	91651562.0	0.549753
2021-01-06	0.655257	0.535454	0.549895	0.628646	99069819.0	0.628646



NANO-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.676041	0.652381	0.670239	0.653638	1959157.0	0.653638
2020-01-06	0.702329	0.653990	0.653990	0.691811	3418504.0	0.691811
2020-01-07	0.697236	0.647054	0.691940	0.650058	4990710.0	0.650058
2020-01-08	0.657617	0.620072	0.651030	0.629762	3938318.0	0.629762
2020-01-09	0.632992	0.609677	0.629259	0.615324	2966831.0	0.615324
•••	•••	•••		•••	•••	
2021-01-02	1.078364	1.011106	1.031365	1.049235	7897599.0	1.049235
2021-01-03	1.846479	1.034650	1.046109	1.690974	87271356.0	1.690974
2021-01-04	1.737256	1.295835	1.698192	1.495213	60359794.0	1.495213
2021-01-05	1.652139	1.388317	1.497438	1.546246	29457285.0	1.546246
2021-01-06	2.670808	1.526638	1.545333	2.530257	121560800.0	2.530257

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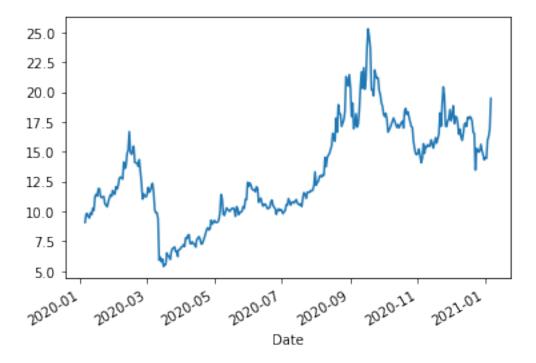


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	High	Low	Open	Close	Volume	\
Date			_			
2020-01-05	9.327485	9.049389	9.144228	9.068814	4.067089e+08	
2020-01-06	9.819713	9.066062	9.076355	9.773406	4.861885e+08	
2020-01-07	9.909088	9.451856	9.775840	9.821853	4.799297e+08	
2020-01-08	10.101566	9.425985	9.822828	9.525661	4.707420e+08	
2020-01-09	9.524695	9.361893	9.524406	9.440099	3.570913e+08	
***	•••	•••	•••		•••	
2021-01-02	14.798790	14.166491	14.502537	14.437279	4.205825e+08	
2021-01-03	16.230030	14.090366	14.439026	15.960466	6.448247e+08	
2021-01-04	17.691862	14.956684	15.963160	16.278473	8.198289e+08	
2021-01-05	17.302031	15.480733	16.282642	16.888006	7.072366e+08	
2021-01-06	20.072956	16.602016	16.890781	19.462030	1.263551e+09	
	Adj Close					
Date						
2020-01-05	9.068814					
2020-01-06	9.773406					
2020-01-07	9.821853					
2020-01-08	9.525661					
2020-01-09	9.440099					
•••	•••					
2021-01-02	14.437279					
2021-01-03	15.960466					

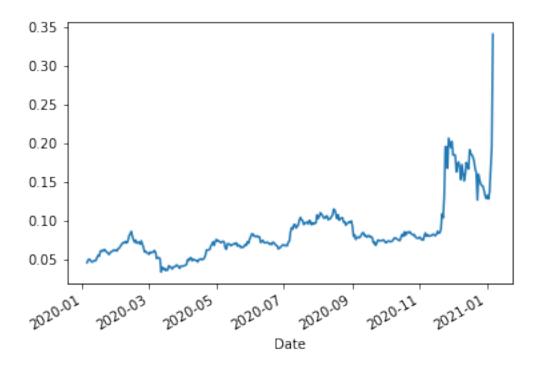
2021-01-04 16.278473 2021-01-05 16.888006 2021-01-06 19.462030

[364 rows x 6 columns]



XLM-USD

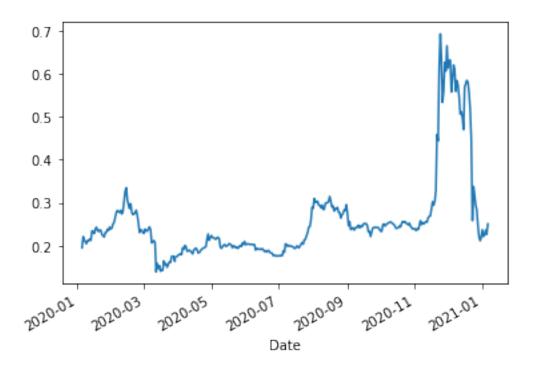
	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.046692	0.044772	0.046165	0.045359	1.659561e+08	0.045359
2020-01-06	0.049292	0.045244	0.045432	0.049124	2.482766e+08	0.049124
2020-01-07	0.050261	0.047908	0.049025	0.049838	2.394073e+08	0.049838
2020-01-08	0.050093	0.046706	0.049916	0.048717	2.135222e+08	0.048717
2020-01-09	0.049246	0.045678	0.047616	0.046458	1.717289e+08	0.046458
•••	•••					
2021-01-02	0.134618	0.127561	0.132471	0.127820	4.632957e+08	0.127820
2021-01-03	0.138974	0.124531	0.127847	0.136423	6.941412e+08	0.136423
2021-01-04	0.165951	0.130889	0.136644	0.165180	1.650893e+09	0.165180
2021-01-05	0.209966	0.151998	0.165094	0.194823	2.558465e+09	0.194823
2021-01-06	0.383481	0.194237	0.194671	0.340793	1.040858e+10	0.340793



XRP-USD

	High	Low	Open	Close	Volume	Adj Close
Date	_		_			_
2020-01-05	0.199223	0.193884	0.194367	0.195537	1.168068e+09	0.195537
2020-01-06	0.223832	0.195068	0.195536	0.221510	2.301679e+09	0.221510
2020-01-07	0.223386	0.209047	0.221576	0.213917	2.237698e+09	0.213917
2020-01-08	0.216704	0.205214	0.213834	0.209026	1.782129e+09	0.209026
2020-01-09	0.209142	0.202589	0.209110	0.204899	1.341131e+09	0.204899
•••	•••	•••			•••	
2021-01-02	0.238388	0.215816	0.237670	0.221655	4.773659e+09	0.221655
2021-01-03	0.237741	0.217167	0.221744	0.225848	5.109899e+09	0.225848
2021-01-04	0.256477	0.219722	0.226038	0.236677	6.141918e+09	0.236677
2021-01-05	0.241251	0.221602	0.236636	0.226750	5.378492e+09	0.226750
2021-01-06	0.269158	0.223464	0.226866	0.250895	7.552727e+09	0.250895

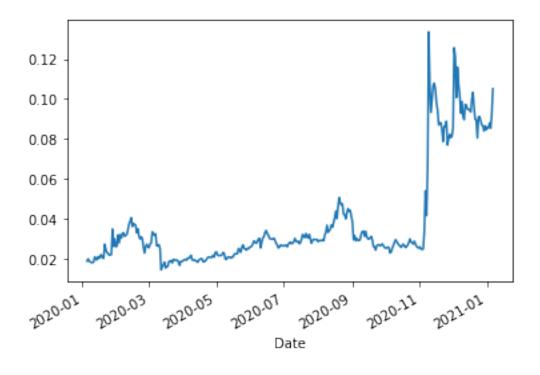
[364 rows x 6 columns]



CVC-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.019927	0.018788	0.019850	0.018832	1778433.0	0.018832
2020-01-06	0.020176	0.018625	0.018845	0.019917	2184070.0	0.019917
2020-01-07	0.020053	0.018794	0.019940	0.018891	1904217.0	0.018891
2020-01-08	0.019135	0.017966	0.018893	0.018420	1761886.0	0.018420
2020-01-09	0.018626	0.017850	0.018284	0.018104	1050243.0	0.018104
•••	•••	•••		•••	•••	
2021-01-02	0.087373	0.081843	0.085898	0.085614	11643594.0	0.085614
2021-01-03	0.089229	0.082797	0.085627	0.088002	20418674.0	0.088002
2021-01-04	0.097222	0.080797	0.088082	0.085404	23937539.0	0.085404
2021-01-05	0.094916	0.082255	0.085552	0.092108	16715952.0	0.092108
2021-01-06	0.115285	0.090213	0.092079	0.105129	43041500.0	0.105129

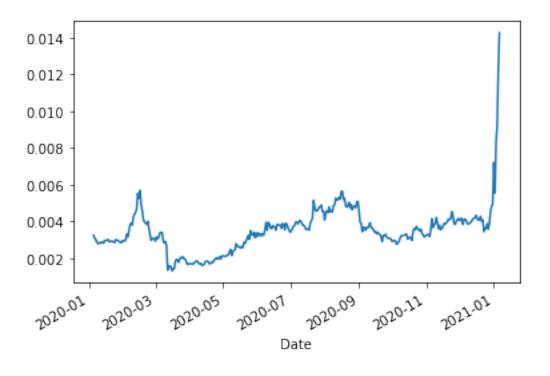
[364 rows x 6 columns]



FUN-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.003297	0.003214	0.003237	0.003237	266032.0	0.003237
2020-01-06	0.003270	0.003064	0.003238	0.003083	592370.0	0.003083
2020-01-07	0.003338	0.002953	0.003079	0.003007	557216.0	0.003007
2020-01-08	0.003038	0.002796	0.003006	0.002865	702339.0	0.002865
2020-01-09	0.002883	0.002749	0.002862	0.002775	336944.0	0.002775
•••	•••	•••		•••	•••	
2021-01-02	0.007577	0.005005	0.007308	0.005543	11407122.0	0.005543
2021-01-03	0.009488	0.005520	0.005520	0.008330	31489594.0	0.008330
2021-01-04	0.010359	0.007293	0.008356	0.009179	14945733.0	0.009179
2021-01-05	0.013737	0.008448	0.009177	0.012184	25430104.0	0.012184
2021-01-06	0.016024	0.011348	0.012178	0.014273	32553575.0	0.014273

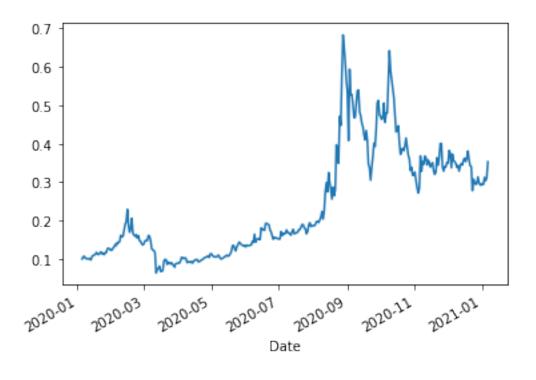
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STORJ-USD

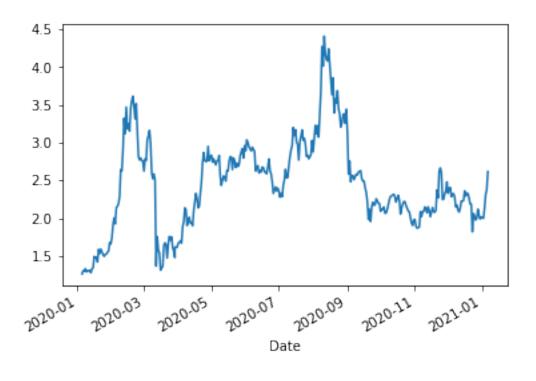
	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.103412	0.100072	0.102478	0.100181	514214.0	0.100181
2020-01-06	0.108549	0.100033	0.100280	0.105773	839137.0	0.105773
2020-01-07	0.109711	0.102716	0.105731	0.106972	841569.0	0.106972
2020-01-08	0.108082	0.099621	0.107006	0.101605	985939.0	0.101605
2020-01-09	0.104204	0.099038	0.101407	0.101453	828607.0	0.101453
•••	•••	•••		•••	•••	
2021-01-02	0.297941	0.286312	0.296310	0.293789	10885817.0	0.293789
2021-01-03	0.322215	0.292372	0.293843	0.312078	22300071.0	0.312078
2021-01-04	0.338708	0.280034	0.312176	0.303347	21950184.0	0.303347
2021-01-05	0.320090	0.285962	0.303324	0.312028	21987311.0	0.312028
2021-01-06	0.356129	0.306537	0.312019	0.352681	24472401.0	0.352681

[364 rows x 6 columns]



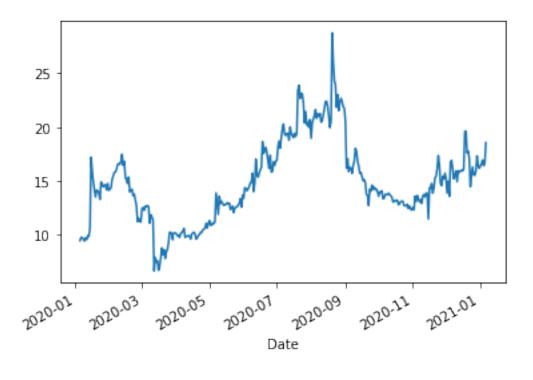
XTZ-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	1.299631	1.248610	1.262098	1.263569	36629230.0	1.263569
2020-01-06	1.341766	1.262805	1.263295	1.305486	43088423.0	1.305486
2020-01-07	1.333132	1.261464	1.306350	1.298295	49139469.0	1.298295
2020-01-08	1.396752	1.274788	1.298326	1.333609	49431499.0	1.333609
2020-01-09	1.367272	1.274408	1.331942	1.289929	47676368.0	1.289929
•••	•••	•••		•••	•••	
2021-01-02	2.056129	1.958316	2.009306	1.998693	233029593.0	1.998693
2021-01-03	2.224712	1.956192	1.999217	2.133314	312112832.0	2.133314
2021-01-04	2.351714	2.050242	2.135093	2.311222	376283723.0	2.311222
2021-01-05	2.459136	2.150207	2.312734	2.379434	370590662.0	2.379434
2021-01-06	2.731993	2.303605	2.380155	2.616993	460356341.0	2.616993



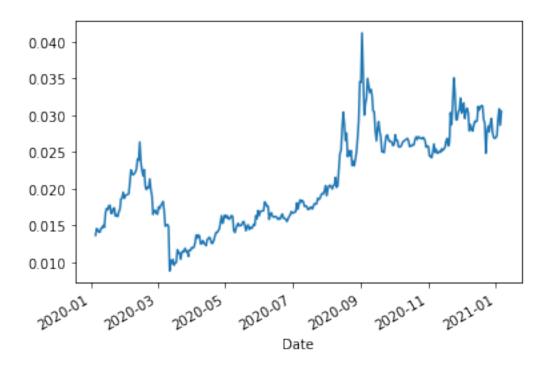
REP-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	9.735121	9.226817	9.246220	9.457958	9706468.0	9.457958
2020-01-06	10.089318	9.420583	9.459557	9.770777	11253579.0	9.770777
2020-01-07	10.010674	9.553603	9.793726	9.713964	8798003.0	9.713964
2020-01-08	10.177095	9.524755	9.690676	9.629851	8878226.0	9.629851
2020-01-09	9.685680	9.384387	9.616157	9.418081	7809373.0	9.418081
•••	•••	•••	•••	•••	***	
2021-01-02	16.992874	16.247942	16.356876	16.570457	17944435.0	16.570457
2021-01-03	17.168510	15.914134	16.575983	16.934664	20810531.0	16.934664
2021-01-04	17.609325	15.640519	16.943830	16.411180	19776819.0	16.411180
2021-01-05	17.159859	15.958707	16.415686	16.614647	14100247.0	16.614647
2021-01-06	19.342606	16.493576	16.624462	18.539682	32913599.0	18.539682



TRX-USD

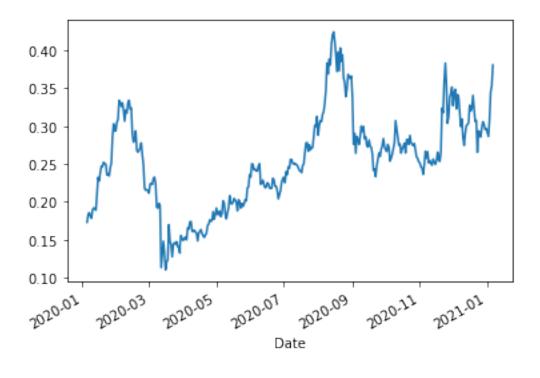
	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.013913	0.013522	0.013531	0.013623	1.079591e+09	0.013623
2020-01-06	0.014548	0.013601	0.013617	0.014548	1.204486e+09	0.014548
2020-01-07	0.014741	0.014210	0.014594	0.014373	1.120169e+09	0.014373
2020-01-08	0.014623	0.013886	0.014378	0.014069	1.120252e+09	0.014069
2020-01-09	0.014109	0.013819	0.014067	0.014063	9.439172e+08	0.014063
•••	•••	•••				
2021-01-02	0.027916	0.026614	0.026934	0.027219	9.809103e+08	0.027219
2021-01-03	0.030023	0.026606	0.027226	0.029495	1.496676e+09	0.029495
2021-01-04	0.032174	0.027266	0.029526	0.030853	1.768802e+09	0.030853
2021-01-05	0.030896	0.027245	0.030840	0.028632	1.715257e+09	0.028632
2021-01-06	0.030939	0.028026	0.028638	0.030515	1.636410e+09	0.030515



MIOTA-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.175379	0.169002	0.174444	0.173044	5642017.0	0.173044
2020-01-06	0.185326	0.172767	0.173108	0.182896	9109465.0	0.182896
2020-01-07	0.197619	0.183048	0.183048	0.185702	10842185.0	0.185702
2020-01-08	0.190445	0.178838	0.186130	0.181100	8308095.0	0.181100
2020-01-09	0.182257	0.176155	0.181139	0.178258	5403819.0	0.178258
•••	•••	•••		•••	•••	
2021-01-02	0.297127	0.278822	0.291219	0.286220	25174949.0	0.286220
2021-01-03	0.313735	0.278261	0.286450	0.309489	36641056.0	0.309489
2021-01-04	0.351109	0.280193	0.309683	0.344717	60563730.0	0.344717
2021-01-05	0.384603	0.317609	0.344124	0.353117	88086747.0	0.353117
2021-01-06	0.398604	0.343657	0.353810	0.380460	79394660.0	0.380460

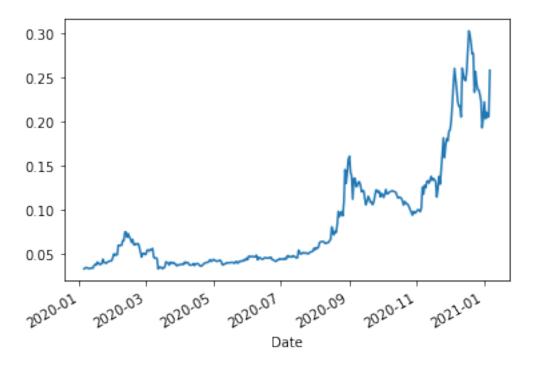
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XEM-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.033270	0.031906	0.032064	0.032363	4489886.0	0.032363
2020-01-06	0.034864	0.031981	0.032368	0.033314	7007130.0	0.033314
2020-01-07	0.034736	0.033223	0.033307	0.033782	6022339.0	0.033782
2020-01-08	0.034884	0.033046	0.033785	0.033345	5280186.0	0.033345
2020-01-09	0.034097	0.032633	0.033344	0.033065	5280555.0	0.033065
•••	•••	•••		•••	•••	
2021-01-02	0.222239	0.199858	0.222105	0.203206	111874688.0	0.203206
2021-01-03	0.216308	0.188379	0.203246	0.210482	156961704.0	0.210482
2021-01-04	0.222396	0.182496	0.211550	0.204813	178336251.0	0.204813
2021-01-05	0.215171	0.193834	0.204968	0.205733	108304877.0	0.205733
2021-01-06	0.287279	0.202339	0.205958	0.258289	427045462.0	0.258289

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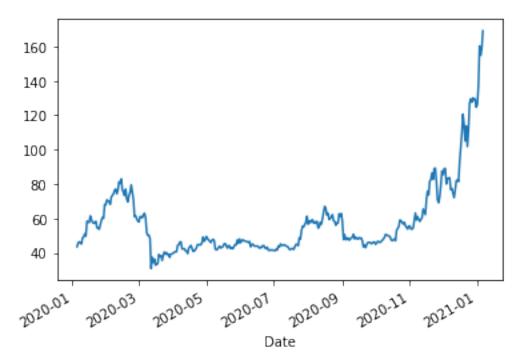


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	High	Low	Open	Close	Volume	\
Date	_		_			
2020-01-05	44.733616	42.998535	43.291382	43.553207	3.017148e+09	
2020-01-06	45.957878	43.494373	43.603893	45.816353	3.349238e+09	
2020-01-07	46.858387	44.723019	45.838680	46.424583	3.611522e+09	
2020-01-08	48.202766	44.627048	46.448353	45.653767	3.633957e+09	
2020-01-09	45.777836	44.310505	45.622269	45.215931	2.986328e+09	
•••	•••	•••	•••	•••	•••	
2021-01-02	140.372574	123.693619	126.272964	136.944885	1.053207e+10	
2021-01-03	163.898636	135.739914	136.949402	160.190582	1.538566e+10	
2021-01-04	173.027817	143.623962	160.271164	154.807327	1.365979e+10	
2021-01-05	162.850189	147.400070	154.897552	158.594772	1.019282e+10	
2021-01-06	169.657455	155.452866	158.665970	169.016922	1.074388e+10	
	Adj Close					
Date						
2020-01-05	43.553207					
2020-01-06	45.816353					
2020-01-07	46.424583					
2020-01-08	45.653767					
2020-01-09	45.215931					
•••	•••					
2021-01-02	136.944885					
2021-01-03	160.190582					

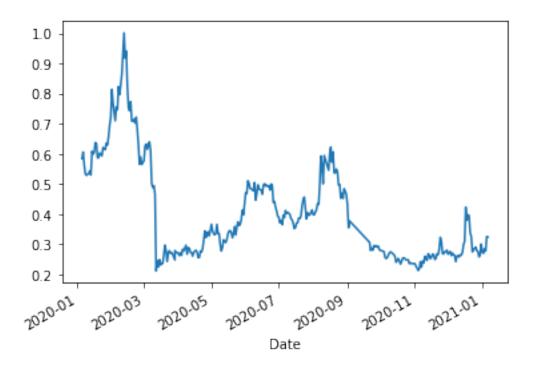
2021-01-04 154.807327 2021-01-05 158.594772 2021-01-06 169.016922

[364 rows x 6 columns]



BEAM-USD

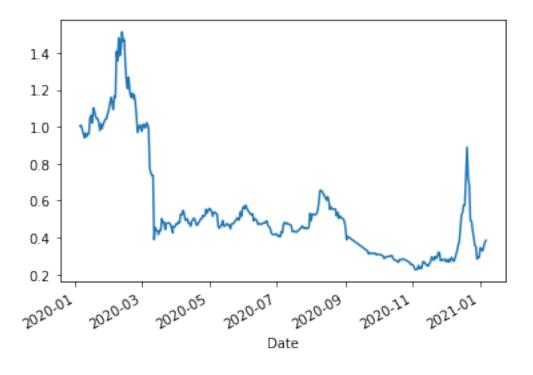
		_	_			
	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.629994	0.519332	0.519332	0.583935	25188851.0	0.583935
2020-01-06	0.624590	0.577204	0.583925	0.605407	26653316.0	0.605407
2020-01-07	0.612851	0.555332	0.605407	0.561558	24342060.0	0.561558
2020-01-08	0.567218	0.524460	0.561558	0.532953	17697033.0	0.532953
2020-01-09	0.544438	0.520993	0.532579	0.528283	19716275.0	0.528283
•••	•••	•••		•••	•••	
2021-01-02	0.275128	0.263377	0.273915	0.269302	6250376.0	0.269302
2021-01-03	0.286432	0.264298	0.269415	0.284357	6957399.0	0.284357
2021-01-04	0.298032	0.263866	0.284364	0.276925	7366742.0	0.276925
2021-01-05	0.331759	0.266600	0.276934	0.325240	9409531.0	0.325240
2021-01-06	0.346050	0.304376	0.325159	0.323318	10917746.0	0.323318



GRIN-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	1.050149	0.929439	0.929754	1.003710	26667687.0	1.003710
2020-01-06	1.022866	0.975967	1.003284	1.007304	27948616.0	1.007304
2020-01-07	1.022045	0.978669	1.008040	0.985476	27489191.0	0.985476
2020-01-08	0.997778	0.941600	0.985476	0.961750	22618651.0	0.961750
2020-01-09	0.961787	0.928258	0.961124	0.939260	22557663.0	0.939260
•••	•••	•••		•••	•••	
2021-01-02	0.363295	0.319657	0.343864	0.338589	10948994.0	0.338589
2021-01-03	0.342755	0.315784	0.338637	0.327485	12080499.0	0.327485
2021-01-04	0.374159	0.314035	0.327239	0.347954	13247002.0	0.347954
2021-01-05	0.389682	0.341488	0.347924	0.371587	13262198.0	0.371587
2021-01-06	0.394882	0.365579	0.371599	0.384545	14112940.0	0.384545

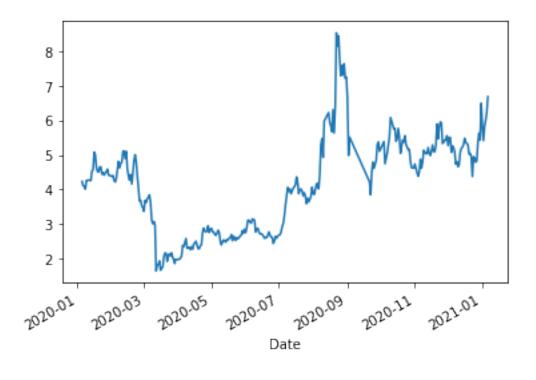
[341 rows x 6 columns]



ATOM1-USD

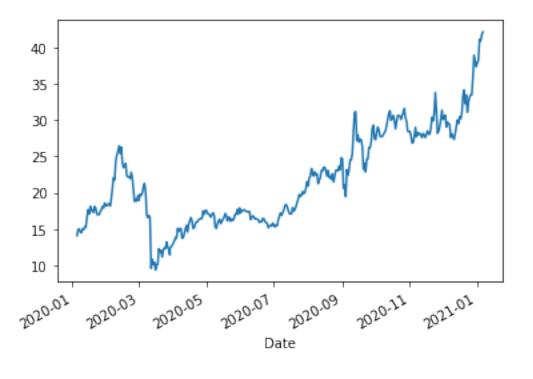
	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	4.395146	4.215782	4.284225	4.231877	115399788.0	4.231877
2020-01-06	4.251155	4.045157	4.232002	4.104942	139523351.0	4.104942
2020-01-07	4.246530	4.069147	4.105193	4.096040	136691939.0	4.096040
2020-01-08	4.175766	3.998340	4.094004	4.010639	128484380.0	4.010639
2020-01-09	4.263191	3.964422	4.010292	4.263191	137133708.0	4.263191
•••	•••	•••		•••	•••	
2021-01-02	5.882211	5.319140	5.869282	5.414613	599846982.0	5.414613
2021-01-03	5.900645	5.301713	5.416301	5.813898	525732596.0	5.813898
2021-01-04	6.262625	5.365686	5.817339	5.996770	627610837.0	5.996770
2021-01-05	6.368610	5.668766	6.002381	6.216816	609572486.0	6.216816
2021-01-06	6.945248	5.885263	6.217183	6.680487	773764043.0	6.680487

[341 rows x 6 columns]



BNB-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	14.410801	13.886547	13.888340	14.111019	202552703.0	14.111019
2020-01-06	15.003565	14.111240	14.111240	14.957808	224800409.0	14.957808
2020-01-07	15.135275	14.568403	14.966209	15.009250	191948560.0	15.009250
2020-01-08	15.242219	14.337952	15.022264	14.602934	183632222.0	14.602934
2020-01-09	14.611089	14.305363	14.589202	14.498314	169699829.0	14.498314
•••	•••	•••		•••	•••	
2021-01-02	38.836254	36.925602	37.917107	38.241592	521965394.0	38.241592
2021-01-03	41.606323	37.818104	38.253727	41.148979	758008613.0	41.148979
2021-01-04	43.132122	38.143982	41.198280	40.926353	807877171.0	40.926353
2021-01-05	41.734600	38.978954	40.937279	41.734600	644270927.0	41.734600
2021-01-06	42.192703	40.592529	41.775536	42.165955	641021601.0	42.165955

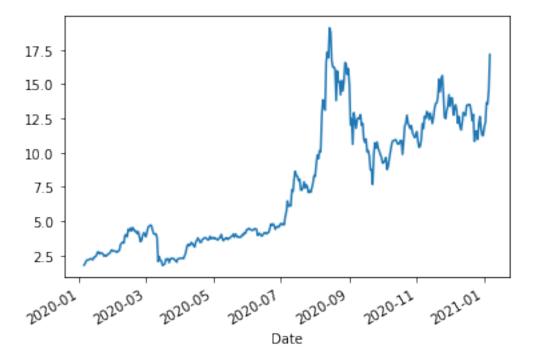


LINK-USD

	High	Low	Open	Close	Volume	\
Date						
2020-01-05	1.855229	1.803682	1.838879	1.807787	5.523594e+07	
2020-01-06	1.938768	1.807984	1.808325	1.937466	8.094118e+07	
2020-01-07	2.125786	1.905077	1.934836	2.114098	1.409213e+08	
2020-01-08	2.334433	2.108173	2.113119	2.183606	1.928211e+08	
2020-01-09	2.232695	2.114586	2.182258	2.186049	1.099384e+08	
•••	•••	•••			•••	
2021-01-02	12.363891	11.520288	11.873410	12.220137	1.562557e+09	
2021-01-03	13.977096	11.883654	12.223365	13.650172	2.298965e+09	
2021-01-04	15.575632	12.597854	13.666396	13.571063	2.926793e+09	
2021-01-05	14.901027	13.174111	13.569752	14.539868	2.435517e+09	
2021-01-06	17.223900	14.177452	14.550183	17.155256	3.654880e+09	
	Adj Close					
Date						
2020-01-05	1.807787					
2020-01-06	1.937466					
2020-01-07	2.114098					
2020-01-08	2.183606					
2020-01-09	2.186049					
•••	•••					
2021-01-02	12.220137					
2021-01-03	13.650172					

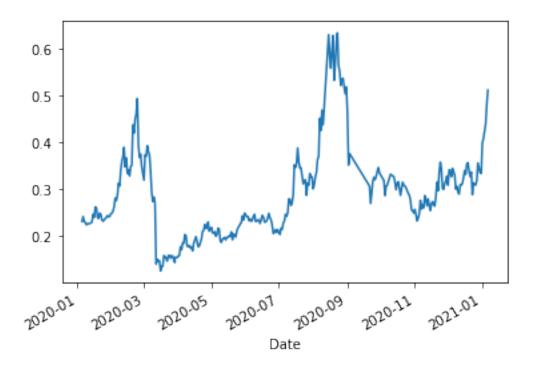
2021-01-04 13.571063 2021-01-05 14.539868 2021-01-06 17.155256

[364 rows x 6 columns]



ALGO-USD

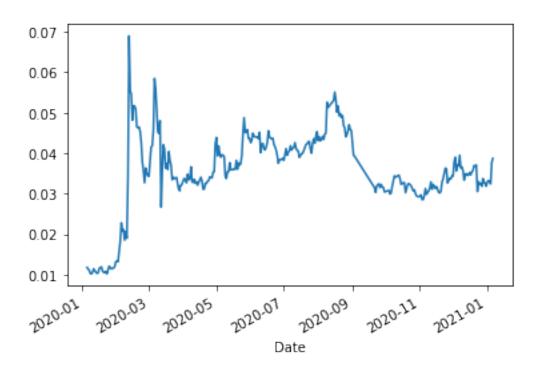
	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.239903	0.230910	0.235912	0.231657	40157155.0	0.231657
2020-01-06	0.244297	0.230826	0.231256	0.242145	43263431.0	0.242145
2020-01-07	0.243708	0.229322	0.242145	0.230930	42565095.0	0.230930
2020-01-08	0.236171	0.226756	0.230930	0.229909	37068981.0	0.229909
2020-01-09	0.230194	0.222618	0.229824	0.224520	38074471.0	0.224520
•••	•••	•••		•••	•••	
2021-01-02	0.460714	0.385091	0.398641	0.408091	417148719.0	0.408091
2021-01-03	0.434376	0.399110	0.407991	0.422767	263098398.0	0.422767
2021-01-04	0.459522	0.370076	0.424077	0.438666	257108478.0	0.438666
2021-01-05	0.493420	0.405449	0.441606	0.479429	423192879.0	0.479429
2021-01-06	0.528184	0.460024	0.479878	0.511315	374099920.0	0.511315



HBAR-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.012718	0.011136	0.011190	0.011760	3472337.0	0.011760
2020-01-06	0.011869	0.011164	0.011772	0.011342	1837289.0	0.011342
2020-01-07	0.011412	0.010869	0.011342	0.011037	1685750.0	0.011037
2020-01-08	0.010952	0.010157	0.010952	0.010276	1159426.0	0.010276
2020-01-09	0.010695	0.010094	0.010263	0.010173	1092002.0	0.010173
•••	•••	•••		•••	•••	
2021-01-02	0.034571	0.032271	0.032947	0.033241	9287951.0	0.033241
2021-01-03	0.033822	0.031689	0.033247	0.033049	10157190.0	0.033049
2021-01-04	0.034750	0.030090	0.033077	0.032408	13435510.0	0.032408
2021-01-05	0.039785	0.032417	0.032453	0.037729	65214329.0	0.037729
2021-01-06	0.039847	0.035233	0.037383	0.038702	51598155.0	0.038702

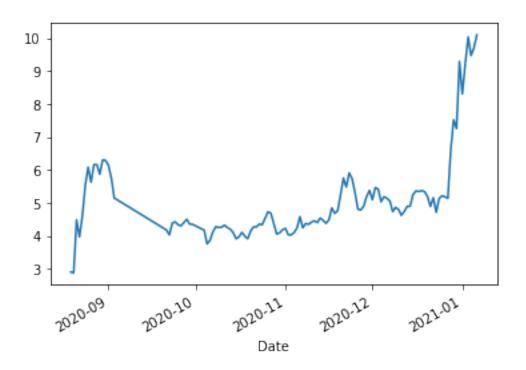
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DOT1-USD

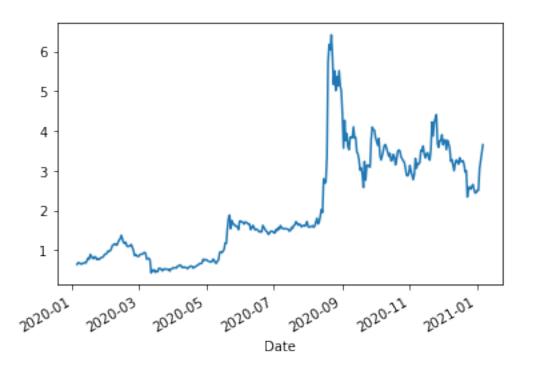
	High	Low	Open	Close	Volume	Adj Close
Date						
2020-08-19	3.077784	2.692896	2.787857	2.900080	4.881987e+07	2.900080
2020-08-20	3.090093	2.730919	2.896923	2.875028	4.931314e+07	2.875028
2020-08-21	4.510613	2.816762	2.878570	4.484690	4.858011e+08	4.484690
2020-08-22	4.487058	3.716271	4.487058	3.967066	3.207495e+08	3.967066
2020-08-23	4.783158	3.812670	3.987413	4.602614	4.076902e+08	4.602614
•••	•••	•••	•••			
2021-01-02	9.761334	7.943290	8.305491	9.208837	3.049232e+09	9.208837
2021-01-03	10.457493	8.873362	9.209648	10.033282	3.032883e+09	10.033282
2021-01-04	10.505565	8.777210	10.062048	9.469611	2.893263e+09	9.469611
2021-01-05	10.041344	9.084263	9.475801	9.701655	2.080742e+09	9.701655
2021-01-06	10.371598	9.489742	9.707112	10.096068	2.382484e+09	10.096068

[120 rows x 6 columns]



OMG-USD

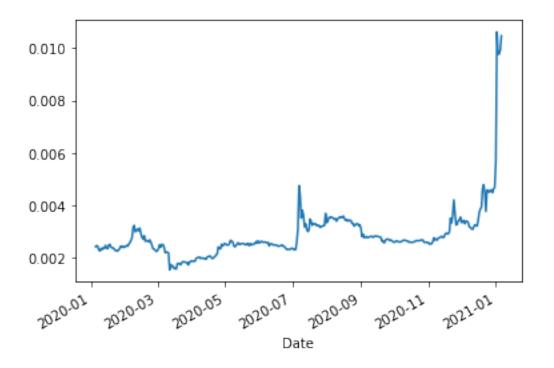
	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.653979	0.629698	0.630670	0.639749	42573647.0	0.639749
2020-01-06	0.684049	0.637149	0.640122	0.683828	53770817.0	0.683828
2020-01-07	0.698886	0.667716	0.683142	0.672666	49369154.0	0.672666
2020-01-08	0.686347	0.643510	0.672988	0.663690	51643692.0	0.663690
2020-01-09	0.662331	0.637040	0.661761	0.643736	49366967.0	0.643736
•••	•••	•••		•••	•••	
2021-01-02	2.657133	2.441254	2.501613	2.499490	226311855.0	2.499490
2021-01-03	3.041629	2.455082	2.499674	3.041629	325168905.0	3.041629
2021-01-04	3.353789	2.690346	3.042642	3.228842	600097784.0	3.228842
2021-01-05	3.665077	3.107901	3.234458	3.438936	739878375.0	3.438936
2021-01-06	3.853700	3.280030	3.439900	3.648901	616535817.0	3.648901



DOGE-USD

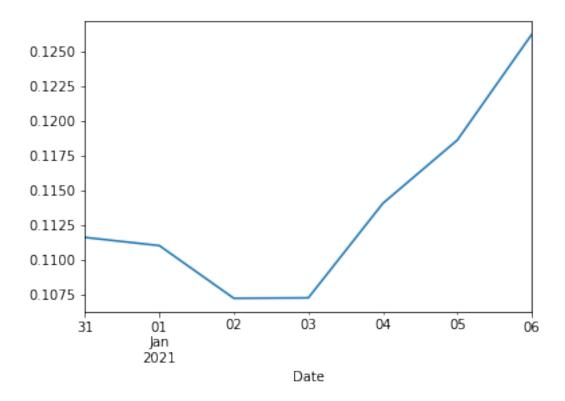
	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.002491	0.002117	0.002240	0.002419	5.263174e+07	0.002419
2020-01-06	0.002564	0.002379	0.002418	0.002463	5.456241e+07	0.002463
2020-01-07	0.002497	0.002354	0.002485	0.002433	5.276734e+07	0.002433
2020-01-08	0.002465	0.002265	0.002433	0.002293	7.725153e+07	0.002293
2020-01-09	0.002314	0.002145	0.002291	0.002256	7.069057e+07	0.002256
•••	•••	•••			•••	
2021-01-02	0.013698	0.005584	0.005686	0.010615	3.421563e+09	0.010615
2021-01-03	0.013867	0.009409	0.010602	0.009771	2.707004e+09	0.009771
2021-01-04	0.011421	0.007878	0.009785	0.009767	1.372399e+09	0.009767
2021-01-05	0.010219	0.008972	0.009767	0.009920	6.872561e+08	0.009920
2021-01-06	0.010854	0.009685	0.009923	0.010465	7.499155e+08	0.010465

[364 rows x 6 columns]



GLM-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-12-31	0.115660	0.108825	0.114601	0.111636	1015192	0.111636
2021-01-01	0.116113	0.109851	0.110856	0.111048	1748289	0.111048
2021-01-02	0.111653	0.104903	0.111048	0.107262	1191299	0.107262
2021-01-03	0.110468	0.101429	0.107250	0.107291	1740325	0.107291
2021-01-04	0.127862	0.101806	0.107536	0.114078	21966797	0.114078
2021-01-05	0.118627	0.107850	0.114078	0.118627	2502245	0.118627
2021-01-06	0.126934	0.110618	0.118643	0.126227	5472862	0.126227



VET-USD

	High	Low	Open	Close	Volume	Adj Close
Date						
2020-01-05	0.005718	0.005492	0.005667	0.005504	60517803.0	0.005504
2020-01-06	0.005766	0.005487	0.005508	0.005735	73540805.0	0.005735
2020-01-07	0.005767	0.005506	0.005736	0.005590	67461953.0	0.005590
2020-01-08	0.005598	0.005305	0.005595	0.005521	79053437.0	0.005521
2020-01-09	0.005512	0.005341	0.005512	0.005367	93401748.0	0.005367
•••	•••	•••		•••	•••	
2021-01-02	0.021099	0.018550	0.019081	0.019985	278974618.0	0.019985
2021-01-03	0.026894	0.019818	0.019993	0.025921	697803740.0	0.025921
2021-01-04	0.027040	0.021485	0.026094	0.024665	550104075.0	0.024665
2021-01-05	0.029001	0.023242	0.024650	0.027909	584473737.0	0.027909
2021-01-06	0.032243	0.027364	0.027917	0.030794	693778828.0	0.030794

[355 rows x 6 columns]

